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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,853	11/05/2003	Mark Duane Foster	2003-0420.01	7794

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LEXMARK INTERNATIONAL, INC.
INTELLECTUAL PROPERTY LAW DEPARTMENT
740 WEST NEW CIRCLE ROAD
BLDG. 082-1
LEXINGTON, KY 40550-0999

EXAMINER

ROYER, WILLIAM J

ART UNIT PAPER NUMBER

2852

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/701,853

Applicant(s)

FOSTER ET AL.

Examiner

William J. Royer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 and 2 is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11052003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

This application is in condition for allowance except for the following formal matters:

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The disclosure is objected to because of the following informalities:

On page 1, line 9, change "drum" to --- photoconductor roller ---.

On page 1, line 20, change "drum" to --- roller ---.

On page 2, line 21, change "is a is a" to --- is a ---.

On page 2, lines 23-24, change "the developer roller seal, the developer roller, and the photoconductor drum, cross-sectioned through the seal" to --- a developer roller seal, a developer roller, and a photoconductor roller, cross-sectioned through a seal ---.

On page 3, line 2, after "under" insert --- the ---.

On page 3, line 12, change "seal has" to --- the seal has a ---.

On page 3, line 13, change "6,487,383" to --- 6,487,383 B2 ---.

On page 3, line 13, after "contacts" insert --- the ---.

On page 3, line 14, change "roller 5" to --- roller 5. ---.

On page 3, line 16, change "side" to --- curved portion ---.

On page 3, line 17, change "font" to --- front ---.

On page 3, line 22, change "backside" to --- back side ---.

On page 3, line 22, change "Frame" to --- The edge of frame ---.

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On page 4, line 14, change "two rollers 5 and 26" to --- developer roller 5 and photoconductor roller 26 ---.

On page 4, line 15, change "an" to --- as ---.

On page 4, line 15, change "two rollers 5 and" to --- developer roller 5 and photoconductor roller ---.

On page 4, lines 21 and 25, before "roller" insert --- developer ---.

On page 5, line 2, change "roller" to --- developer roller 5 ---.

On page 5, line 2, after "material" insert --- 5b ---.

On page 5, lines 6 and 8, before "roller" insert --- developer ---.

On page 5, line 6, change "a gap" to --- gaps 30a and 30b ---.

On page 5, lines 7, 14 and 17, after "core" insert --- material ---.

On page 5, line 8, change "location" to --- located ---.

On page 5, line 9, change "a gap is" to --- gaps 30a and 30b are ---.

On page 5, lines 9 and 10, change "the gap is" to --- gaps 30a and 30b are ---.

On page 5, line 11, change "body" to --- core material ---.

On page 5, line 13, after "gaps" insert --- 30a and 30b ---.

On page 5, line 14, change "a seal" to --- the seal ---.

On page 5, lines 14 and 16, after "Gaps" insert --- 30a and 30b ---.

On page 5, lines 19-20 should be rewritten in a more grammatically correct form.

On page 7, line 2, change "Developer" to --- A developer ---.

On page 7, line 4, before "roller" insert --- developer ---.

Appropriate correction is required.

Claim Objections

Claims 1 and 2 are objected to because of the following informalities:

Claim 1, line 1, change "The method" to --- A method ---.

Claim 1, line 4, change "the step of" to --- the step of: ---.

Claim 1, line 5, after "photoconductor" insert --- roller ---.

Claim 2, line 1, change "the method" to --- A method ---.

Claim 2, line 4, change "the step of" to --- the step of: ---.

Claim 2, line 5, after "photoconductor" insert --- roller ---.

Appropriate correction is required.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Allowable Subject Matter

Claims 1 and 2 are allowable over the prior art of record because the prior art of record fails to teach or suggest a method in which a developer roller is provided with a region or gap under a seal in order to reduce the stiffness under the seal so that significant frictional heat damage to toner which would occur without the region or gap which reduces stiffness does not occur.

Relevant Prior Art

The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Miyamoto et al disclose a developing apparatus having a coated developing roller with a sealing member provided at the end of the developing roller for preventing leakage of developer.

Uehara discloses a seal structure providing an improved sealing function and reducing an amount of heat generated by friction.

Dougherty discloses a system and method of reducing toner seal leakage by the introduction of a step groove in a developer roller.

Dougherty et al disclose a method and system for the reduction of toner pressure applied to a print seal through the implementation of a tapering channel.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William J. Royer whose telephone number is (571) 272-2140. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur T. Grimley can be reached on (571) 272-2136. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink that reads "William J. Royer". The signature is written in a cursive, flowing style.

William J. Royer
Primary Examiner
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wjr
May 31, 2005